

WHAT IS CLAIMED IS:

1. A motion detection image recording system,
comprising:

an image sensor operable to view a surveillance site
and output real-time image data corresponding to the site;

a processor operable to receive the image data from
the image sensor;

a memory coupled to the processor;

a transformation application residing in the memory
and executable by the processor, the transformation
application operable to detect a real-time feature segment
associated with the site from the image data; and

an analysis engine residing in the memory and
executable by the processor, the analysis engine operable
to compare the real-time feature segment with a baseline
feature segment and initiate recording of the image data if
the feature segment comparison exceeds a predetermined
criteria.

2. The system of Claim 1, wherein the transformation
application is further operable to generate a histogram of
the real-time feature segment, and wherein the analysis
engine is operable to compare the histogram of the real-
time feature segment with a histogram of the baseline
feature segment.

3. The system of Claim 1, wherein the analysis
engine is operable to identify an occlusion of the real-
time feature segment relative to the baseline feature
segment and initiate recording of the scene in response to
identifying the occlusion.

4. The system of Claim 1, wherein the image sensor comprises an analog camera, and further comprising an analog-to-digital converter operable to receive analog image data from the analog camera and transmit digital image data to the processor.

5. The system of Claim 1, wherein the transformation application comprises a Hough routine operable to extract the real-time feature segment from the image data.

6. The system of Claim 1, wherein the processor is further operable to receive feature segment criteria, and wherein the analysis engine initiates recording of the image data if the feature segment comparison exceeds the feature segment criteria.

7. The system of Claim 1, wherein the feature segment criteria comprises an occlusion ratio, and wherein the analysis engine initiates recording of the image data if an occlusion of the real-time feature segment exceeds the occlusion ratio relative to the baseline feature segment.

8. A method for motion detection image recording, comprising:

generating a baseline feature segment associated with a surveillance site;

5 receiving real-time image data corresponding to the surveillance site;

detecting a real-time feature segment associated with the surveillance site from the real-time image data;

10 comparing the real-time feature segment with the baseline feature segment; and

recording the real-time image data if the comparison of the real-time feature segment with the baseline feature segment exceeds a feature segment criteria.

15 9. The method of Claim 8, wherein detecting a real-time feature segment comprises transforming the real-time image data using a Hough routine to extract the real-time feature segment from the real-time image data.

20 10. The method of Claim 8, wherein generating a baseline feature segment comprises:

receiving baseline image data corresponding to the surveillance site;

25 detecting a plurality of feature segments corresponding to the surveillance site from the baseline image data; and

identifying one of the plurality of feature segments as the baseline feature segment.

30 11. The method of Claim 8, wherein comparing the real-time feature segment comprises determining whether an occlusion is present in the real-time feature segment relative to the baseline feature segment, and wherein

recording the real-time image data comprises recording the real-time image data if the occlusion exceeds the feature segment criteria.

5 12. The method of Claim 8, wherein receiving real-time image data comprises:
 generating analog image data via an analog camera;
 converting the analog image data to digital image data; and

10 transmitting the digital image data to a processor to detect the real-time feature segment.

 13. The method of Claim 8, wherein generating a baseline feature segment comprises:

15 receiving baseline image data corresponding to the surveillance site;

 detecting a plurality of feature segments associated with the surveillance site from the baseline image data; and

20 identifying a subset of the plurality of feature segments as the baseline feature segment.

 14. The method of Claim 8, wherein comparing the real-time feature segment with the baseline feature segment comprises:

25 generating a baseline histogram associated with the baseline feature segment;

 generating a real-time histogram associated with the real-time feature segment; and

30 comparing the baseline histogram to the real-time histogram.

15. The method of Claim 8, wherein comparing the real-time feature segment to the baseline feature segment comprises:

determining a length of the baseline feature segment;

5 determining a length of the corresponding real-time feature segment; and

determining whether a difference between the length of the baseline feature segment and the length of the real-time feature segment exceeds the feature segment criteria.

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16. A method for image recording, comprising:
generating baseline feature segments corresponding to
a surveillance site;
receiving real-time image data corresponding to the
5 surveillance site;
generating real-time feature segments associated with
the surveillance site from the real-time image data;
determining whether an occlusion is present in one or
more of the real-time feature segments; and
10 recording the real-time image data if the occlusion is
present in one or more of the real-time feature segments.

17. The method of Claim 16, further comprising:
receiving feature segment criteria;
15 determining whether the occlusion exceeds the feature
segment criteria; and
wherein recording comprises recording the real-time
image data if the occlusion exceeds the feature segment
criteria.

18. The method of Claim 16, wherein detecting the
real-time feature segments comprises applying a Hough
routine to the real-time image data to extract the real-
time feature segments from the real-time image data.

19. The method of Claim 16, further comprising:
generating a baseline histogram corresponding to the
baseline feature segments;
generating a real-time histogram corresponding to the
20 real-time feature segments; and
comparing the baseline histogram with the real-time
histogram to determine whether an occlusion is present in
one or more of the real-time feature segments.

20. The method of Claim 16, further comprising recording the real-time image data if a quantity of the real-time feature segments exceeds a quantity of the baseline feature segments.

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